$$S0 = D0 \wedge DC$$

$$S1 = D1 \wedge S0 \wedge TC \wedge DC$$

$$S2 = D2 \wedge S1 \wedge TC \wedge DC$$

$$S3 = D3 \wedge S2 \wedge TC \wedge DC$$

$$S4 = D4 \wedge S3 \wedge TC \wedge DC$$

$$S5 = D5 \wedge S4 \wedge TC \wedge DC$$

$$S6 = D6 \wedge S5 \wedge TC \wedge DC$$

$$S7 = D7 \wedge S6 \wedge TC \wedge DC$$

$$S8 = TC \wedge 1$$

$$S9 = DC$$

Figure 1

$$S0 = D0 \wedge INV$$

$$S1 = D1 \wedge S0 \wedge INV$$

$$S2 = D2 \wedge S1 \wedge INV$$

$$S3 = D3 \wedge S2 \wedge INV$$

$$S4 = D4 \wedge S3 \wedge INV$$

$$S5 = D5 \wedge S4 \wedge INV$$

$$S6 = D6 \wedge S5 \wedge INV$$

$$S7 = D7 \wedge S6 \wedge INV$$

$$S8 = 1$$

$$S9 = INV$$

Figure 2

$$S0 = D0 \wedge DC$$

$$S1 = D1 \wedge S0 \wedge AUX \wedge DC$$

$$S2 = D2 \wedge S1 \wedge AUX \wedge DC$$

$$S3 = D3 \wedge S2 \wedge AUX \wedge DC$$

$$S4 = D4 \wedge S3 \wedge AUX \wedge DC$$

$$S5 = D5 \wedge S4 \wedge AUX \wedge DC$$

$$S6 = D6 \wedge S5 \wedge AUX \wedge DC$$

$$S7 = D7 \wedge S6 \wedge AUX \wedge DC$$

$$S8 = AUX \wedge 1$$

$$S9 = DC$$

Figure 3

$$S0 = D0 \wedge INV$$

$$S1 = D1 \wedge S0 \wedge INV$$

$$S2 = D2 \wedge S1 \wedge INV$$

$$S3 = D3 \wedge S2 \wedge INV$$

$$S4 = D4 \wedge S3 \wedge INV$$

$$S5 = D5 \wedge S4 \wedge INV$$

$$S6 = D6 \wedge S5 \wedge INV$$

$$S7 = D7 \wedge S6 \wedge INV$$

$$S8 = AUX$$

$$S9 = INV$$

Figure 4